

third place, the two may not after all be specifically distinct. A lady from Milwaukee tells me that fragrant white pond lilies occur near that place."

**MEGARRHIZA.**—Since receiving the August number of the GAZETTE, I have been on the alert for *Megarrhiza*, being fully determined to find it if it grew in the county of Sonoma. For three days I looked for it upon the bushes on Fitch Mountain. The next day, however, I descended the Russian river in search of a corn field, in which I remembered the *Sicyos angulatus* to have particularly flourished in the East. About a mile and a half from Healdsburg, on the right bank of the river, we spied the looked-for corn field, and carefully stepping to the top of the high picket fence enclosing the field, we perceived that the back fence was at intervals covered by a closely matted, brown-colored vine. Hastening across the field we grasped the dried fruit of *Megarrhiza*. After a long and tedious search we obtained some fifteen seeds, corresponding to the description given by Dr. Gray. There are four seeds of an almond shape contained in a thorny obovate fruit. The fruit being very ripe, the seeds had generally fallen and had been devoured by the rats.

Desiring to satisfy ourselves that it was surely *Megarrhiza*, we began with our botany knife to search for the root. Having followed a vine into the ground to the depth of 18 inches, we pressed into service a "small boy," who was curiously eyeing our movements. Securing a long handled shovel we continued our downward career. At the depth of 21 inches we came to the top of the rootstock; an hour later we had come to bed rock and were hauling the stock to the surface. This I carried home and will give the measurements: weight, 18 lbs; length of main root, 2 feet 10½ inches; circumference at the top, 21½ inches; circumference one foot from base, 15½ inches; shape, for 20 inches nearly cylindrical, then fusiform. Depth of hole, from top to bottom, 55½ inches.—R. H. THOMSON, *Healdsburg, California.*

**THE "BARRENS" OF SOUTHERN INDIANA.**—Ever since the writer had the privilege of arranging Dr. A. Clapp's botanical collection, made principally in 1836-1839, and discovered many desirable plants labeled "Barrens," these barrens have been often in his mind as one of the most desirable localities in Indiana for the botanical collector. At last the trip has been made, the Barrens explored, and we lay the results before the readers of the GAZETTE. The Barrens are of considerable extent, occupying quite a large area in the corners of four counties, Clarke, Floyd, Washington and Harrison. All over this region the drainage is effected by "sink-holes," not a stream, rivulet, or a single drop of running water appearing at the surface. The country is very rolling and in the bottom of each depression are found from one to three "sink holes," sometimes full of water, at others mere filthy mires, or empty. The surface is a mass of flinty stones and concretionary boulders, "nigger-heads" as they are called. The result of this flinty soil and absence of surface moisture is plainly shown in the vegetation. Scattered all over this area are thickets of scrub oak and small shrubby undergrowth, separated from one another by natural openings where, so far as we could judge, no tree or shrub had ever grown. It was in these open places that we found our best species. A trip through the Barrens is a disappointing one, for although one can secure many valuable prizes, he is constantly grieving on account of the ravages of civilization. When Dr. Clapp collected his specimens here forty years ago, it was no doubt a perfect wilderness, but now settlers have come in, a German population has taken possession of the Barrens, and our natural openings are made to yield some of the finest wheat in the State. Instead of the gorgeous display of rare and beautiful flowers, which cover the ground profusely wherever they have been left standing room, we see the monotonous succession of fields of grain or stubble. Even the fence corners are kept scrupulously clear of "weeds," for your German farmer cares nothing for science if it chokes up his fence rows. In the fields of one farmer, however, the weeds had the start, and there we found some good species, such as *Liatris scariosa*, Willd., *Eupatorium sessilifolium*, L.,

*Brachycheata cordata*, T. & G., *Solidago rigida*, L., *S. nemoralis*, Ait., *Silphium trifoliatum*, L., *Echinacea purpurea*, Moench, *Rudbeckia laciniata*, L., *Lepachys pinnata*, T. & G., *Helianthus mollis*, Lam., *H. rigidus*, Desf., *H. microcephalus*, T. & G., *H. hirsutus*, Raf., *Coreopsis tripteris*, L., *Dysodia chrysanthemoides*, Lag., *Stylosanthes elatior*, Swartz, *Desmodium rotundifolium*, DC., *Lespedeza procumbens*, Mx., *Tephrosia Virginiana*, Pers., *Phaseolus helvolus*, L., *Eryngium yuccifolium*, Michx., etc. Enough has been given to show the general nature of the species. We were there in that most unfortunate time, that could be called the resting season, when all the spring and early summer flowers have disappeared and the fall flowers have not yet begun to show their brilliant blossoms. All along over the Knobs, on the way to the Barrens, we encountered any quantity of *Crotou monanthogynum*, Michx., in beautiful condition for specimens. *Dysodia* was hardly absent from the roadside for thirty miles, and its fragrance came to be one of the accompaniments of the landscape. It is to be hoped that a trip later in the fall will bring back fresh specimens of many more desirable species.—J. M. C.

ZANTHOXYLUM AMERICANUM, MILL.—A few days since while hurrying through the woods my attention was called to a small cluster of trees bearing bright red berries, to all appearances. On nearing it I found it to be *Zanthoxylum*, or Prickly Ash, and noticed at once the air was filled with a delightful fragrance as of fresh lemons. By a little pressure of the pods, which I found upon closer examination to have an oily look and to vary in color from a greenish yellow to a bright red at maturity, I soon found my fingers covered with an oil so volatile that it was hardly expressed until it was gone. However, I had found the source of the pleasant odors that were filling the air. My curiosity led me one step further, and that was to taste the fruit. I knew it was medicinal, but I was hardly prepared for the revelations of the next moment, for as I began to chew, it began to take good hold upon my tongue, mouth and lips, and such a burning dryness as I had for the next half hour I have never before known. Water only seemed to add fuel to the flame which thus carried its stimulating effects further down. As a result of this experimental knowledge I would heartily approve of the name "Toothache-tree," for he who dares to chew the green fruit will soon have little time to think of his previous pains. These bushes with their brilliant fruit, slightly foliage and exquisite fragrance, certainly invite cultivation.—A. H. Y.

CURIOUS DISSEMINATION.—For two years I was baffled in my efforts to gather seed of the beautiful *Leucocrinum montanum*, abundant in Sierra Valley, but rare elsewhere in California. During the first season I found how oddly the pericarp remained down in the ground, though the large, creamy white flower was exerted two or three inches above it, but not until too late to save seed at the close of the second season did I discover how the shining black seeds were spirited away.

The *Leucocrinum* is a Liliaceous plant of the fibrous-rooted kind, and acaulescent. Its grass-like leaves,  $\frac{1}{2}$  inch wide by 4 to 6 long, rise from a caudex sessile upon the roots, an inch or more below the surface of the ground. As inferred, the pericarp is short stipitate, and matures its seed at a locality in the ground, to be sure, but quite unfavorable for successful rooting, since, when the pericarp bursts, the seeds are discharged upon a spot already occupied by the perennial parent plant; that is, it would seem that they are thus left to fate, but when the spot is searched after the plant ripens and its leaves are gone not a seed remains in place. They are carried away by the incurved bases of the withered leaves, and blown with them by the wind over the plain.—J. G. LEMMON.

PLANTS FOR SALE.—Mr. Geo. D. Butler, of Almont, Iowa, has several sets of southwestern plants to sell, containing very rare species, as for instance, *Selenia aurea*, Nutt., *Stellaria Nuttallii*, T. & G., *Tephrosia onobrychoides*, Nutt., *Acacia hirta*, Nutt., *Rosa foliolosa*, Nutt., *Gaura sinuata*, Nutt., *Trepocarpus Æthuse*, Nutt., *Apium Popei*,